



**SECRET**

SECRET

50X1-HUM

NEED NEW CUTTERS, ALLOYS FOR HIGH-SPEED CUTTING -- Zarya Vostoka, 30 Jul 50

Pavel Bykov is working on an automatic machine manufactured at the Krasnyy proletary Plant. He has achieved a cutting speed of 1,250-1,880 meters per minute on this machine.

He claims that any lathe operator can work on this machine at these speeds day after day; but that new, particularly hard cutters and superdurable alloys are needed. These will undoubtedly be developed.

WOOD BUSHINGS REPLACE BABBIT -- Znaniye-sila, No 6, Jun 50

Engineer V. T. Kuguzov of the Machine Building Plant imeni Kotlyakov in cooperation with workers of the Scientific-Research Institute for Plywood has developed a design for bearings in which babbit bushings are replaced with bushings made of lignofoil -- multilayer pressed plywood, treated with a water resistant compound. The new bearings not only save material but are four times as light as the old.

PRODUCE THREE NEW MACHINE TOOLS -- Vechernyaya Moskva, 22 Jun 50

V. Levshunov, head designer at the Krasnyy proletary Plant, and Kostyunin, Volkov, Kaplan, and other designers have completed drawings for a new screw-cutting lathe. The precision of this machine tool can be measured in tenths of a micron. The machine-tool world has never before seen such a machine.

L. Raykher, Belov, Bondarev, Vaksman, and other technologists have worked out the technology for the new screw-cutting lathe. Parts for the new machine are being machined and a place for its assembly is being prepared.

The technologists have given their word that all units and parts for this superb machine will be ready for the assembly workers by the end of July.

The output of two new machine tools for the ball-bearing and automobile industries has been perfected at the Krasnyy proletary Plant. The first combination machine tool was designed by a brigade of designers headed by M. M. Shevtsov. This is a high-production automatic. The first group of these machines has been assembled.

Assembly of the other new automatic was completed today for plants of the automobile and tractor industry

CLOSED DIE INCREASES PRODUCTIVITY, SAVES METAL -- Vechernyaya Moskva, 22 Jul 50

Processing metal in closed dies effects a manifold increase in labor productivity and brings about a large metal saving. The machining process is shortened since the allowance on forged pieces is cut almost in half.

The Krasnyy proletary Plant has successfully manufactured closed dies for 23 different parts. One example of its productivity and economic effect can be seen in the manufacture of a massive gear which was previously made in a cushion die and weighed 17 kilograms. On using a closed die for its manufacture, its weight was reduced nearly 5 kilograms.

Above-plan products are being produced from metal saved.

- 2 -

SECRET

**SECRET**

**SECRET**

SECRET

50X1-HUM

NEW BORER REPLACES HIGHLY SKILLED WORKER -- Ogonek, No 13, 26 Mar 50

Among new models of machine tools produced in 1949 is the coordinating and boring machine put out by the Moscow Grinder Plant. The statement that this unusual machine is a prototype of machines with which man of Communist society will be supplied is no exaggeration. That which previously required strenuous labor on the part of a highly skilled worker is now accomplished by an electric current. This "intelligent" machine tool, independently and with absolute precision bores parts without preliminary markings and machines any hole according to a drawing. The machine tool itself signals the worker responsible for it of the slightest difficulty, replaces a completed work piece with a blank, and keeps an account of its own production.

NEW LATHE FOR LOCOMOTIVE WHEELS -- Vechernyaya Moskva, 28 Jun 50

Testing of a new lathe for turning passenger locomotive wheels has begun at the Kramatorsk Heavy Machine-Tool Building Plant. The lathe is equipped with six powerful motors and four supports, making it possible for one man to machine four wheel pairs simultaneously. Machine-tool control is automatic.

Many new machines and mechanisms are being perfected at Kramatorsk enterprises. The greater part of these are intended for mechanizing heavy labor at construction, metallurgical and machine-building plants, and in the mining industry.

DISPATCHES FIVE WOODWORKING MACHINES -- Leninskoye Znamya, 27 Jun 50

The Moscow Krasnyy put' Machine-Building Plant, Ministry of Transportation, has dispatched five woodworking planers to rolling-stock depots and repair points. Four sides of beams or boards can be worked simultaneously on these machines. Each machine frees 3-12 workers.

NEW PRECISION INSTRUMENTS -- Trud, 4 Jul 50

The manufacture of spline plug and ring gages is an extremely laborious task. Yamshchikov, chief of the flat-gage shop at a plant in Chelyabinsk, has designed a plate with a precision index dial. The spline ring is pressed against the plate by magnetic force in a strictly specified position. High precision is thus achieved and labor productivity is sharply increased.

Instead of an optical indexing head which was used for checking spline plug gages, an indexing polyhedron has been designed. Labor productivity has doubled, and rejects rarely appear. Stakhanovites have begun to grind wheels with two stones simultaneously. This increases the precision of spline plug gages and doubles the speed of the grinding process.

- E N D -

- 3 -

SECRET

**SECRET**